

**ENVIRONMENTAL ASSESSMENT
FOR PROPOSED FINAL LAND USE
AT THE FERNALD ENVIRONMENTAL
MANAGEMENT PROJECT**

**FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
FERNALD, OHIO**



SEPTEMBER 1998

**U.S. DEPARTMENT OF ENERGY
FERNALD AREA OFFICE**

**REV. 1
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**ENVIRONMENTAL ASSESSMENT
FOR
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1.0 PURPOSE AND NEED

The U.S. Department of Energy (DOE) must identify a final land use at the Fernald Environmental Management Project (FEMP) to appropriately plan for future remediation and restoration activities (Figure 1). This final land use must incorporate DOE commitments to remediation of the FEMP, as well as input from stakeholders and The Fernald Natural Resource Trustees. DOE has prepared this Environmental Assessment (EA) to identify the final land use alternatives and present DOE's preferred alternative for final land use at the FEMP.

This EA has been prepared under DOE's guidelines for implementation of the National Environmental Policy Act (NEPA, 10 CFR 1021). This EA is being made available for public review consistent with the spirit of NEPA, which mandates public input into decisions of Federal Agencies. It also addresses previous DOE commitments to consult with the public prior to any decisions on land use. Upon completion of the public involvement process, DOE will either issue a Finding of No Significant Impact (FONSI) documenting their final decision, or proceed with a full Environmental Impact Statement (EIS). The FONSI would function as the decision document in the NEPA EA process, and would be made available for public comment for 15 days prior to finalization. If an EIS is initiated, DOE will issue a Notice of Intent.

2.0 BACKGROUND

Regulatory Compliance

The DOE has made specific commitments to the U.S. Environmental Protection Agency (EPA) pertaining to remediation of the FEMP under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). These commitments are documented in the Operable Unit (OU) 2 Record of Decision (ROD) (DOE 1995), the OU3 ROD (DOE 1996a), and the OU5 ROD (DOE 1996b). The CERCLA process did not identify a final land-use for the FEMP, but the OU5 ROD did use an undeveloped park as the representative land use to establish clean up levels. In addition, the OU5 ROD committed DOE to obtain stakeholder input on final land use decisions at the FEMP. Commitments made in the RODs will influence the proposed action, as well as the potential alternatives to the proposed action for future land-use at the FEMP. Therefore, DOE has incorporated these commitments into the development of the proposed final land use for the FEMP. The key commitments are summarized below.

- DOE will remediate the FEMP to the final remediation levels (FRLs) for all contamination attributed to the FEMP, as documented in the OU2 ROD (DOE 1995) and the OU5 ROD (DOE 1996b). The FRLs, once achieved, will not allow unrestricted use of the FEMP and institutional controls will be required.
- Per the OU 2 ROD (DOE 1995), the FEMP will remain under federal ownership. Therefore, any reasonable alternative would have to contemplate DOE's commitment to federal ownership of the FEMP and recognize the additional constraints listed above.
- Per the OU 3 ROD (DOE 1996a), no buildings or below grade structures will be left at the FEMP for future use after completion of remedial activities with the possible exception of mobile office trailers. Any use of buildings would require a change in the OU3 ROD.
- As established in the OU5 ROD, DOE will monitor and maintain an On-site Disposal Facility (OSDF) in perpetuity.
- Commitments for other environmental monitoring will be carried out for as long as appropriate per the existing RODs.
- DOE will protect the existing natural resources at the FEMP, as committed to in the OU5 ROD (1996b).
- To meet wetland mitigation requirements under Section 404 of the Clean Water Act, 15-acres of wetlands will be established, preferably on-site.

The CERCLA documentation prepared for remediation of the FEMP Site also included the appropriate NEPA evaluations. These "integrated" CERCLA/NEPA evaluations considered the potential impacts that would result from remediation activities at the FEMP, including the disturbance of drainage patterns, excavation of soil, and the loss of wetland and other habitats. The OU 4 Feasibility Study/Proposed Plan - Environmental Impact Statement was the lead CERCLA/NEPA document for remediation of the FEMP. The OU 4 ROD was issued as an integrated CERCLA/NEPA ROD (DOE, 1994). Subsequent CERCLA/NEPA documents for the remaining OUs were tiered from the OU 4 integrated CERCLA/NEPA documentation and also incorporated NEPA values as appropriate. The integrated CERCLA/NEPA evaluations for remediation of the FEMP did not assess environmental impacts for final land-use activities.

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Public Involvement

Another key consideration in the development of the proposed alternative for final land use at the FEMP is input from public meetings. Discussions have occurred with the Fernald Citizens Advisory Board (FCAB), the Community Reuse Organization (CRO), Fernald Residents for Environmental Safety and Health (FRESH), Native American Groups and local governmental entities. In addition, the FCAB and the CRO have made recommendations regarding final land use, as summarized below:

Fernald Citizens Advisory Board (FCAB)

The FCAB did not have any specific recommendations for final land use, but did recommend that final land use decisions should be made with input from local communities (FCAB 1995). Furthermore, FCAB recommended that residential and agricultural uses of the FEMP after clean up should not be considered (FCAB 1996). Finally, FCAB also recommended that all existing natural resources at the FEMP be protected and enhanced, and that all necessary natural resource restoration activities take place on-site (FCAB 1996).

Community Reuse Organization (CRO)

The CRO has begun an investigation into the feasibility of using a portion of the FEMP for commercial development (CRO 1997). The findings of this investigation will help the CRO determine if there is a market demand for commercial development on a portion of the site. In addition, the CRO has expressed an interest to DOE and the Fernald Natural Resource Trustees (NRTs) to help integrate recreational uses into the final land use at the FEMP (CRO 1997).

Natural Resource Trustee (NRT) Negotiations

Over the past several years, negotiations with the NRTs have played an important role in establishing the proposed final land use alternative. The Fernald NRTs include the State of Ohio (represented by the Ohio Environmental Protection Agency), the Department of the Interior (DOI) including representatives from the Office of Environmental Policy and Compliance and the U.S. Fish and Wildlife Service, and the DOE. The DOE has a dual role as an NRT and as the "Responsible Party" for remediation of the FEMP Site. In 1986, the State of Ohio filed a \$206 million claim against DOE for injury to natural resources, and ongoing negotiations with the NRTs have centered around settling this claim and any natural resource liability DOE may face.

The NRTs have developed a draft Natural Resource Impact Assessment (NRIA) and draft Natural Resource Restoration Plan (NRRP) outlining the proposed restoration

activities at the FEMP (DOE 1997a). The NRIA and NRRP are companion documents and contain the following information relevant to the proposed settlement between the NRTs:

- The NRIA provides an assessment of natural resource impacts that have occurred from the past release of hazardous materials at the FEMP.
- The NRRP proposes a series of natural resource restoration projects which are designed to compensate for natural resource impacts that have occurred at the FEMP.
- A Habitat Equivalency Analysis (HEA) is provided as an appendix to the NRRP which provides an assessment of how much restoration is required given the impacts identified in the NRIA. The HEA concluded that 540 acres of restoration would be required for non-groundwater impacts. The HEA is used as a tool to ensure that proposed restoration projects adequately compensate for natural resource impacts (excluding groundwater).
- A Water Availability Study is also provided as an appendix to the NRRP which evaluates the feasibility of converting the excavated areas in the Production Area to open water habitat.

The revised NRIA and NRRP (DOE 1998b) are being made available to the public at the same time that this EA is available for public comment. Anyone who wishes to review the revised NRIA and NRRP can obtain a copy at the Public Environmental Information Center.

In April 1998, an approach for resolution of the existing and potential natural resource damage claims was developed by DOE and the other NRTs. This settlement proposed by the NRTs includes natural resource restoration of a large portion of the FEMP after remedial activities are completed. Under the terms of the proposed settlement, areas of FEMP to be restored do not include the area occupied by the OSDF or the 23-acre area currently being evaluated by the CRO for commercial development. The natural resource restoration area also does not include approximately 20 acres of the FEMP where natural resource restoration projects and research activities are being conducted in accordance with the OU4 Dispute Resolution Agreement (DOE 1998a). Although these projects do relate to natural resource restoration, they are being conducted pursuant to a separate settlement and are not being included in the proposed settlement related to natural resources. In addition, natural resource restoration would allow for the reburial of Native American Remains, if determined feasible.

The DOE believes onsite restoration of the FEMP site to be the most appropriate approach for resolution of the Natural Resource Claim. Alternative avenues for

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settlement could require offsite activity to meet DOE's natural resource restoration obligations. The conduct of offsite actions is contrary to the DOE's mission and is not considered to be a cost-effective option.

3.0 PROPOSED ACTION

The proposed action for final land use at the FEMP accommodates all DOE commitments regarding remediation of the site, as summarized in Section 2.0. The proposed action also includes input from community groups and the approach for resolution among the NRTs (DOE 1998a). Under the proposed action:

- A majority of the FEMP (approximately 884 acres of the 1,050-acre site) would undergo natural resource restoration by implementing a series of restoration projects after remedial activities are complete in each area.
- The area where the OSDF will be located is excluded from natural resource restoration to allow DOE to fulfill its commitment for continued monitoring and maintenance of this facility.
- A 23-acre plot in the south-central portion of the site may be set aside for potential commercial development at the request of the CRO if the results of their investigation determine there is a market demand for commercial development. If DOE determines that there is interest in commercial development, an additional NEPA evaluation will be performed prior to the decision whether to lease the property for commercial use.

Figure 2 identifies the proposed action for conceptual final land use at the FEMP. The restored habitat types will include upland forest, riparian forest, tallgrass prairie, wetlands, and open water. As the remediation of specific areas at the FEMP is completed, natural resource restoration activities will be initiated. Restoration will be carried out in a phased approach, essentially following the sequence of soil remediation. As remediated areas of the site are certified clean, restoration will occur as soon as possible. Restoration in undisturbed (i.e., unremediated) areas of the site will occur as the schedule for the restoration of remediated areas permits. Remediated areas of the site will be regraded slightly to establish proper drainage patterns as part of restoration. Once proper drainage patterns have been established, revegetation will occur. Deep excavations in the central portion of the site (i.e., former production area) will be converted to open water systems (i.e., ponds or lakes) surrounded by tallgrass prairie. Other excavation areas, which are closer to Paddys Run, will be replanted with the appropriate vegetation to expand the wooded corridor along the stream. Restoration activities will also occur in undisturbed portions of the site to enhance existing natural resources.

There are several commitments and considerations that will be factored into the development of the FEMP's conceptual final land use and the restored habitat types, as follows:

- Restoration projects must fit into the remediation schedule for each area of the site, and no restoration project can begin until the soil remediation area in which it will take place is completed, and the area has been certified clean.
- To optimize the success of the various natural resource restoration projects, the site will be restored to approximate the topography and drainage patterns as they existed prior to the construction of the site facilities, to the extent practical.
- Drainage patterns and water availability will be considered for wetland mitigation and open water habit formation as part of the detailed design of restoration projects.
- DOE has proposed that all wetland mitigation and natural resource restoration occur on-site to avoid the acquisition of additional property.
- As committed to in the various RODs and to support future restoration work, vegetation in the Paddys Run corridor (and in other areas) will be protected as much as possible during remediation.
- The reburial of Native American remains would also be integrated with restoration, as necessary.

Additional details of the proposed natural resource restoration of the FEMP can be found in the revised NRRP (DOE 1998b). Table 1 of this EA identifies the planned schedule for the design and implementation of the various natural resource restoration projects, along with the section in the NRRP where the project is discussed. Restoration will be carried out through a series of restoration projects that will be designed and integrated with the current soil remediation schedule.

It is possible that recreational uses or ecological research/educational uses could be integrated with restoration activities depending on the input received during stakeholder involvement. If this is the case, DOE would prefer that recreational uses be consistent and compatible with the natural resource restoration use of the site. Examples of these recreational uses could possibly include hiking trails, bike paths, interactive/ educational displays, and/or wildlife viewing areas.

4.0 ALTERNATIVES TO THE PROPOSED ACTION

Each alternative was evaluated relative to the following criteria:

- The alternative should not result in significant negative impact to the environment.
- The alternative must meet all regulatory commitments.
- The alternative should contribute to settlement of the state's Natural Resource Claim.
- The alternative must be acceptable to the public. The public has expressed a desire for natural resource restoration as well as some commercial development.

Table 2 provides a summary of the evaluation of alternatives.

Alternatives to the proposed action are discussed in this section. The alternatives have been developed while considering previous DOE commitments, as summarized in Section 2.0.

No Action Alternative

Under the No Action Alternative, all DOE commitments would be fulfilled through site remediation, and following remediation:

- Areas of the site that are excavated and disturbed from remedial activities would be regraded only to the degree necessary to stabilize slopes and ensure proper drainage. Depressions created during remediation (e.g., waste pit area, production area and borrow area) would not be backfilled, but slopes would be stabilized to ensure proper drainage. Once areas are stabilized and proper drainage is established, seeding per guidelines of the Sitewide Excavation Plan (SEP, DOE 1998c) would occur to establish vegetation and control erosion.
- Access controls, such as fencing, signs and gates on access roads would be in place at the conclusion of remedial activities.
- Areas of the site that are not disturbed during excavation (e.g., Paddys Run corridor and northern woodlot) would be protected and maintained in their current condition. Wetlands remaining at the FEMP after remediation would also be protected and maintained.

- There would be no planned recreational or commercial use of the site, and no ecological restoration would take place.

While the no action alternative would fulfill DOE's commitment to site remediation, it may not fully compensate for natural resource impacts that have occurred at the FEMP. This alternative would result in no adverse human health effects, and very limited environmental impacts (e.g., air and water quality impacts), as the site would left in a stabilized condition. These impacts are discussed in more detail in Section 5.0.

Enhanced Grading Alternative

Under the Enhanced Grading Alternative, all DOE commitments would be fulfilled through site remediation, and following remediation:

- Areas of the site which have been excavated during remediation would be backfilled to approximately pre-excavation elevations and graded to support proper drainage. These areas would be seeded per SEP guidelines to help control erosion.
- Access controls, such as fencing, signs and gates on access roads would also be in place at the conclusion of remedial activities.
- Areas of the site that are not disturbed during excavation (e.g., Paddys Run corridor and northern woodlot) would be protected and maintained in their current condition. Wetlands remaining at the FEMP after remediation would also be protected and maintained.
- "Priority Natural Resource Areas" would be enhanced, as feasible, for resolution of natural resource issues at the site (e.g., the State of Ohio's 1986 claim, wetland mitigation). However, this restoration may not fully compensate for natural resource impacts that have occurred at the FEMP.
- Areas of the site which have been backfilled and regraded (Waste Pit Area, Production Area, Borrow Area) may be available for some alternate use (e.g., commercial, industrial) depending on the level of interest and the technical feasibility.

The Enhanced Grading Alternative would provide the opportunity for more of the site to be used for a commercial or industrial use, while preserving and enhancing existing natural resources. If DOE did not receive any interest in development of the regraded areas of the site for alternate land use, then these areas would be evaluated for additional natural resource restoration to address natural resource trustee and

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mitigation issues. This alternative would result in no adverse human health effects, and very limited environmental impacts. These impacts are discussed in more detail in Section 5.0.

5.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL IMPACTS

Proposed Action

The proposed alternative is to conduct natural resource restoration over the majority of the FEMP. The proposed action is recommended by the DOE because it meets all regulatory requirements and is consistent with the public input received to date. This alternative would result in positive long-term impacts to human health and the environment. Following remediation, all existing habitats would be enhanced so that the natural resources would be more diverse and of a higher quality than prior to construction of the site or at any point during site operations. In addition, the alternative allows DOE to settle its Natural Resource Claim through on-site restoration activities, thus avoiding the need to purchase additional property.

Grading activities associated with natural resource restoration could result in air impacts through fugitive dust emissions. Grading activities will be necessary to establish appropriate stability and drainage patterns and are not anticipated to take longer than a few weeks with the possible exception of the production area. Controls such as watering will be used to ensure that fugitive dust emissions are minimized.

Grading activities associated with natural resource restoration could result in some increased runoff to Paddys Run or other water ways. However, silt fences and other controls will be used to minimize runoff from areas where grading is occurring. Because of the relatively short duration and minimal scope of grading activities, minimal impacts to local water ways or groundwater are anticipated.

The proposed action would not result in any further impact of wetland or floodplain areas above and beyond those that occur during remediation of the FEMP. Wetland and floodplain impacts were evaluated in the integrated CERCLA/NEPA documents for OU 5, including the requirements for evaluation and notification under 10 CFR 1022, "Wetland/Floodplain Environmental Review Requirements." The proposed action would result in the creation of at least 15-acres of new wetlands in order to meet wetland mitigation requirements under 404 of the Clean Water Act.

There are several plants and animals that are listed as either threatened or endangered by the State of Ohio and/or on the federal level that occur or have the potential to occur on the FEMP. The Indiana Bat is Federally Endangered and the northern portion of the Paddys Run corridor has been identified as excellent habitat, although no Indiana

Bat individuals have been found on the FEMP. The Sloan's crayfish is threatened in the State of Ohio and is thriving in the northern portions of Paddys Run. The spring coral root is also endangered in Ohio and has the potential to occur on the FEMP. The proposed action would enhance the existing habitat for these species and would result in no further impact to any threatened or endangered species.

Because all remediation areas of the FEMP have been previously surveyed for cultural resources, the proposed action would not result in any adverse impact on archaeological or other historic resources. The FEMP was declared eligible for the National Register of Historic Places by the Ohio Historic Preservation Office (OHPO) in 1995. As a result, DOE entered into a Programmatic Agreement (PA) with the Advisory Council on Historic Preservation and the OHPO to document past operations at the FEMP to help preserve the history of what has occurred at the site (DOE 1996c). A second PA has been reached between DOE, the Ohio Historic Preservation Office and the Advisory Council on Historic Preservation regarding future archaeological investigations at the FEMP (DOE 1997b). This PA provides a streamlined mechanism for conducting and reporting the results of archaeological investigations. Restoration activities in areas of the FEMP that have not been remediated will be surveyed prior to any ground disturbing activities pursuant to the Archaeological PA.

The proposed alternative provides for the reburial of Native American remains within areas that undergo natural resource restoration. Reburial of Native American remains would have a positive outcome with respect to Environmental Justice because the requests of Native American tribes and groups would be met. Environmental Justice initiatives by DOE ensure that actions do not impact a disadvantaged segment of the population. No additional environmental justice concerns will result from the proposed action, and no other socioeconomic impacts are anticipated from the proposed action.

The area under consideration by the CRO for potential commercial development will have to be evaluated in the future when proposed development activities are better defined in order to adequately address NEPA. The specific factors surrounding the lease of the 23-acre tract of land by DOE for potential commercial development can not be completely anticipated and will be subject to additional NEPA evaluation. Therefore, the NEPA process will be utilized to obtain stakeholder input on specific proposals for leasing this land when and if there is a demand for it. Likewise, DOE will solicit stakeholder input on specific proposals for natural resource restoration as design documents are completed.

While the area within the footprint of the OSDF would also be subject to negative environmental impacts, the OSDF is a DOE commitment under the OU 2 ROD and will be present regardless of the selected alternative for FEMP final land use. Impacts related to the OSDF were evaluated in the Integrated OU2 Feasibility Study - National Environmental Policy Act evaluation, and are not subjected to a reevaluation under this

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There are no anticipated negative cumulative impacts that would result from the proposed action.

No Action Alternative

Under the No Action Alternative, site remediation would be carried out per the RODs and the site would be stabilized by reseeding disturbances with grass so that excess erosion problems would not occur. Undisturbed areas of the site (e.g., Paddys Run, Northern Forested Woodlot) would be protected. The No Action Alternative would not result in adverse human health or environmental impacts. The no action alternative would not have negative impacts on air quality, water quality, groundwater, floodplains, wetlands, or endangered species, as existing natural resources at the FEMP would be protected. For example, the Paddys Run Corridor and Northern Woodlot would remain in their current condition under this alternative. It also would not result in negative impacts to cultural resources; however, any reburial of Native American remains would occur in protected areas of the FEMP, such as the Paddys Run Corridor and the Northern Woodlot.

This alternative does not leave the site in a condition that provides benefit to stakeholders from the standpoint of natural resources. It does not allow DOE, pursuant to the proposed settlement with the NRTs, to resolve any liability associated with natural resource injuries. In addition, it does not allow DOE to satisfy negotiated commitments or to satisfy regulatory requirements related to natural resources (e.g., wetland mitigation).

Enhanced Grading Alternative

Under the Enhanced Grading Alternative, site remediation would be carried out per the RODs, then the excavated areas of the site (e.g., production area, borrow area) would be extensively backfilled and regraded so that excess erosion problems did not occur. Backfilling and regrading activities would be carried out in these areas to support possible commercial development. This alternative would lead to additional environmental impacts resulting from the transportation and placement of backfill material. These impacts include fugitive dust emissions and increased sediment load to stream. In addition, the restoration of impacted natural resources would be delayed while backfill and grading activities took place.

Undisturbed areas of the site (e.g., Paddys Run, Northern Forested Woodlot) would be protected and possibly enhanced to help resolve natural resource issues. Additionally, this alternative would not impact the Great Miami Aquifer, floodplains, wetlands, or endangered species, as existing natural resources on the FEMP would be protected.

No cultural resources would be impacted as a result of the proposed action; however, any reburial of Native American remains would be limited to protected areas of the FEMP (e.g., Paddys Run Corridor, Northern Woodlot).

This alternative would require renegotiations with the Fernald NRTs, as it does not provide sufficient compensatory acreage for natural resource restoration as required by the proposed settlement reached between DOE and the other Fernald NRTs. This alternative would provide only limited opportunities for resolving natural resource issues at the FEMP. This alternative is cost-prohibitive due to the need to purchase backfill material, perform extensive regrading, and settle the Natural Resource claim through offsite activity.

Cumulative impacts such as traffic flow and noise are expected to be minimal, but would vary depending on the level of commercial development that occurred on the site.

6.0 REFERENCES

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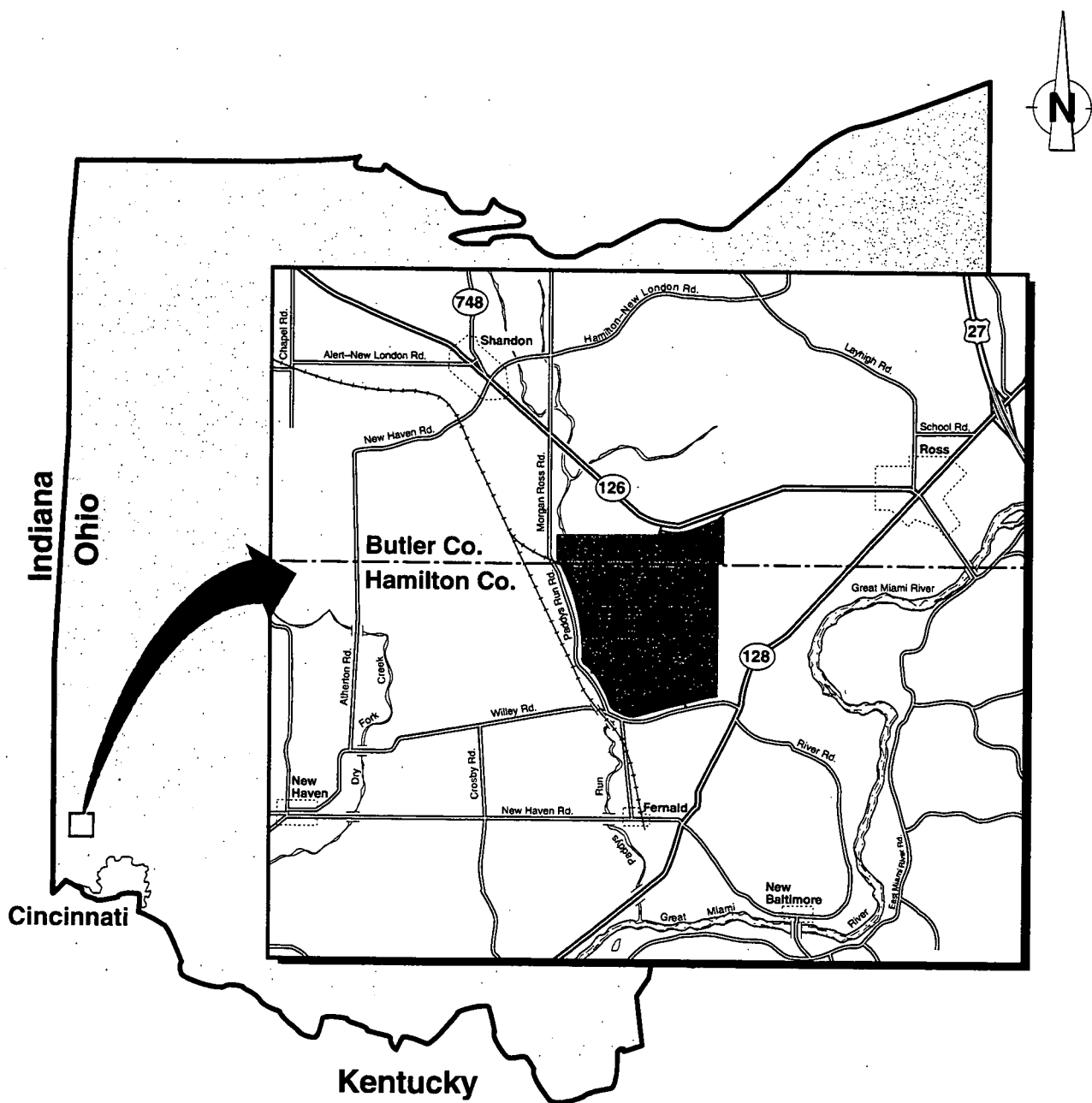
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7.0 LIST OF AGENCIES CONSULTED

Fernald Citizens Advisory Board (FCAB)
Community Reuse Organization (CRO)
Ohio Environmental Protection Agency
U.S. Department of the Interior
U.S. Fish and Wildlife Service
Fernald Residents for Environmental Safety and Health (FRESH)
Crosby Township Trustees
Morgan Township Trustees
Ross Township Trustees
Butler County Planning Commission
Hamilton County Planning Commission

8.0 LIST OF ACRONYMS

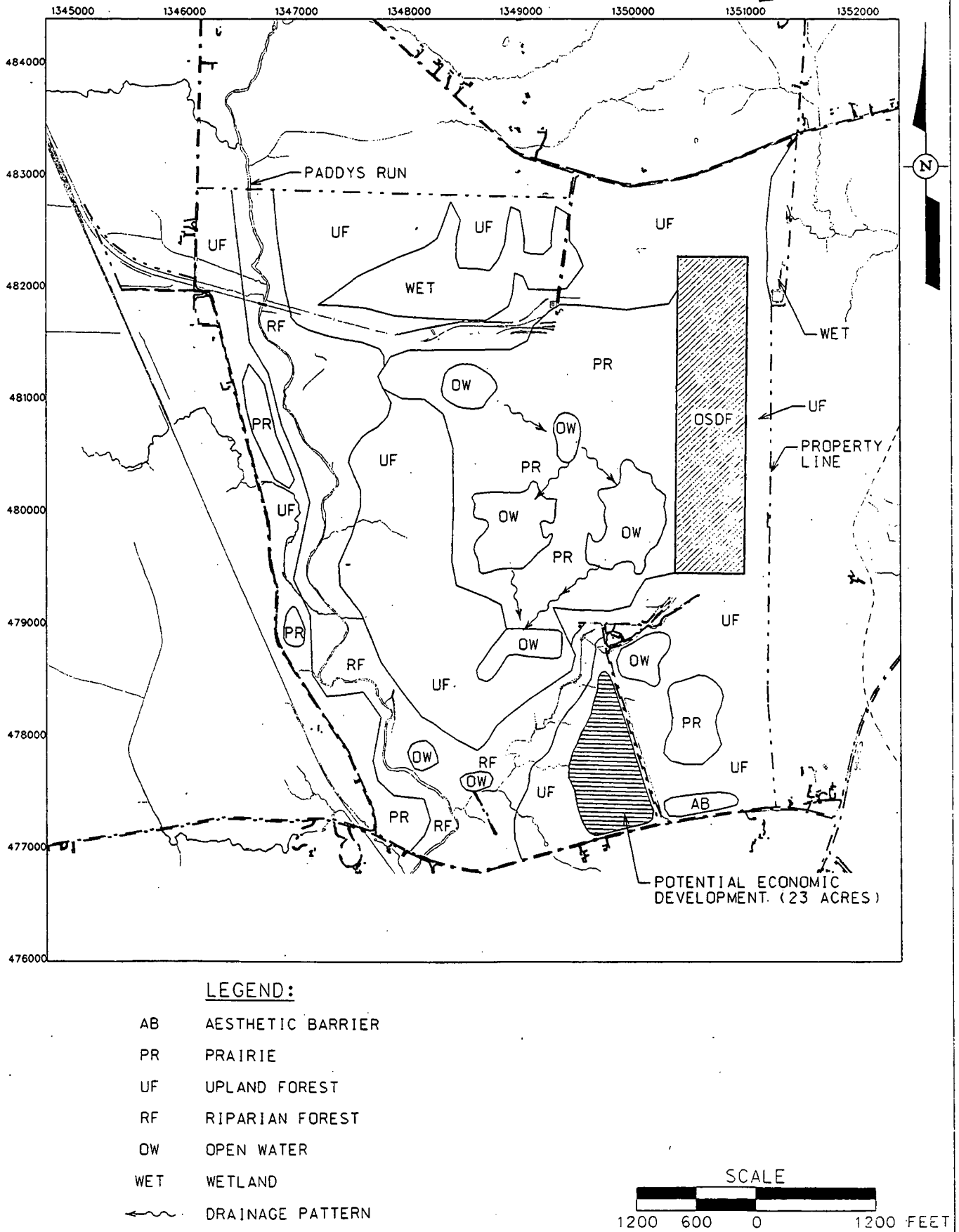
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFR	Code of Federal Regulations
CRO	Community Reuse Organization
DOE	Department of Energy
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
FCAB	Fernald Citizens Advisory Board
FEMP	Fernald Environmental Management Project
FONSI	Finding of No Significant Impact
FRESH	Fernald Residents for Environmental Safety and Health
FRL	Final Remediation Level
HEA	Habitat Equivalency Analysis
NEPA	National Environmental Policy Act
NRIA	Natural Resource Impact Assessment
NRRP	Natural Resource Restoration Plan
NRT	Natural Resource Trustees
OHPO	Ohio Historic Preservation Office
OSDF	On-site Disposal Facility
OU	Operable Unit
PA	Programmatic Agreement
ROD	Record of Decision
SEP	Sitewide Excavation Plan



The FEMP covers about 1,050 acres (425 hectares).

Figure 1 FEMP and Vicinity

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LEGEND:

- AB AESTHETIC BARRIER
- PR PRAIRIE
- UF UPLAND FOREST
- RF RIPARIAN FOREST
- OW OPEN WATER
- WET WETLAND
- ← DRAINAGE PATTERN

Figure 2 Conceptual Final Land-Use

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TABLE 1

NATURAL RESOURCE RESTORATION PROJECTS AT THE FEMP

Restoration Project	Fiscal Year for Design	Fiscal Year to Implement	Section in NRRP	Acres Restored
Aesthetic Barriers	1998	1998	4.1	1
Wetland Mitigation-Phase I	1998	1999	4.2	6
Demonstration Forest Project	1998	2000	4.3	20
Area 2, Phase I Revegetation	1999	2001	4.4	20
Area 1, Phase I Northern Pines Enhancement	2000	2002	4.5	49
Area 1, Phase III Northern Woodlot/ Wetland Mitigation - Phase II	2001	2002	4.6	103
East Paddys Run Corridor	2002	2003	4.7	70
West Paddys Run Corridor	2003	2004	4.8	77
A1P11 Borrow Area, Area 2, Phase III	2004	2005	4.9	139
Former Production Area	2005	2006	4.10	217
Waste Storage Area	2006	2007	4.11	72
OSDF Buffer	2007	2008	4.12	110
TOTAL				884

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TABLE 2

SUMMARY OF ALTERNATIVES EVALUATION

	ROD Requirements	Wetlands Mitigation Requirement	Threatened & Endangered Species	Historic Preservation	Natural Resources Claim
No Action	+	0	0	0	0
Enhanced Grading	+	0	0	0	0
Proposed Action	+	+	+	+	+

"+" = Positive Impact
"- " = Negative Impact
"0 " = No Impact